Highlights of the Quarterly Meeting

FEDERAL INTERAGENCY COMMITTEE ON INDOOR AIR QUALITY (CIAQ)

Wednesday, April 23, 2003

Introduction: given by Barbara Pabotoy, EPA Co-Chair. Members and guests introduced themselves.

CPSC - Consumer Product Safety Commission Update - Treye Thomas

Treve Thomas reported for Lori Saltzman.

Candlewicks

CPSC has voted to ban the use of lead core wicks in candles.

NIST - National Institute of Standards and Technology Update - Summarized by Phil Jalbert, EPA

Natural Ventilation System Design Tool: NIST has completed a Natural Ventilation System Design Tool called (LoopDA for Loop Design and Analysis). LoopDA provides the designer of natural ventilation systems with an environment in which to perform and document the process of designing the opening sizes of natural ventilation systems and analyzing the system behavior under a variety of operating conditions. LoopDA is described in a recent NIST publication (NISTIR 6967) and will be available for download from the NIST Multi-zone Modeling website at http://www.bfrl.nist.gov/IAQanalysis/default.htm.

Evaluation of Displacement Ventilation and Thermally De-coupled Ventilation Systems: NIST is continuing a study for the EPA to perform an initial evaluation of the potential benefits and limitations of advanced ventilation systems including displacement ventilation (DV) and thermally de-coupled ventilation (TDV) systems in commercial buildings. Literature on these systems has been collected and is being reviewed. After the literature review, simulations will be performed to determine the potential benefits and limitations of DV and TDV systems

<u>BASE Ventilation Data</u>: NIST is continuing to analyze the ventilation data collected as part of the EPA BASE study of 100 office buildings. We are focusing on outdoor air intake rates, supply airflow rates and how building factors affect these rates. Should have the data analyzed by mid-2003.

<u>Study of Hybrid Ventilation</u>: With DOE and ARTI funding, we are continuing a simulation study to examine the performance of natural and hybrid ventilation systems in US office buildings. A 50-zone model of a 5-story office building has been created and trial simulations with a natural ventilation system are being performed.

<u>HUD projects</u>: NIST is continuing a number of projects funded by the Healthy Homes Initiative and the Office of Policy Development and Research. They include:

- Definition of a set of residential buildings that represent the US residential housing stock.
- Modeling of indoor contaminant sources, focusing on moisture, cooking and other activities.
- Development of database of IAQ modeling inputs including source strengths, deposition rates, filter efficiencies.
- Study of airflow & contaminant transport from attached garages in single-family residences.
- Long term study of moisture transport and the ability to predict indoor moisture levels in an occupied townhouse.

<u>IEQ Performance Metrics</u>: NIST is continuing a project to investigate the development of metrics to quantify indoor environmental conditions, specifically what has been proposed, how metrics could be used, are we ready yet and what work needs to be done.

<u>NIST TEST HOUSE</u>: NIST is continuing testing of its new double-wide manufactured test house on the NIST campus. We are focusing on establishing its air-tightness and ventilation characteristics, and have developed a CONTAM model of the building. Will be conducting studies of mechanical ventilation, air cleaning, VOC emissions from building materials, and residential moisture issues.

ASHRAE STANDARD 62: The committee is in the process of voting on recommendations to publish four key addenda: 62g on separation of smoking and nonsmoking spaces, 62h on the alternative IAQ Procedure for ventilation system design, 62n on the Ventilation Rate Procedure for determining design outdoor air intake rates, and 62x on building envelope requirements related to IAQ, such as humidity control. If these recommendations pass, these four addenda will go before the ASHRAE Standards Committee and the Board of Directors in June. For more information, contact Andy Persily at 301 975-6418 or andyp@nist.gov.

The ASHRAE SPC 62.2P committee addressed all comments from the 4th public review at its meeting in January. A few editorial changes were made to the draft. The committee also met in April to complete public review paperwork. A letter ballot to recommend publication of the standard is currently underway. Also, the committee continues to work on a companion guideline. For more information, contact Steven Emmerich at 301-975-6459 or steven.emmerich@nist.gov.

DOE - Department of Energy Update - Terry Logee

DOE sent Max Sherman of LBNL as a representative to the International Energy Association (IEA) Air Infiltration & Ventilation Committee (AIVC) meeting held in the UK in March. LBNL is working to complete at least one of several reports due to the AIVC from DOE/LBNL.

EPA - Environmental Protection Agency Update - Barbara Pabotoy

1-EPA Celebrates World Health Day In celebration of World Health Day, the Indoor Environments Division and other EPA program offices joined the Department of Health and Human Services (HHS) and the Pan American Health Organization (PAHO) for a children's environmental health fair hosted in HHS' Great Hall on Tuesday, April 8. Approximately 100 elementary school children attended the health fair and enjoyed learning about a variety of environmental health issues, such as asthma, lead, pesticides, nutrition, and sun safety. Katrin Kral, Alisa Smith, and Kara Miller represented the Division's asthma program and engaged the children in fun activities to raise awareness about asthma and indoor environmental triggers. Giveaways and educational materials were distributed to all of the children.

<u>2-IAQ - Indoor Health and Productivity (IHP) Project</u> IED has been working with LBNL on a National Science and Technology Council project, to organize information about the relationship between IAQ, Health, Productivity, and Cost. The project, known as the Indoor Health and Productivity (IHP), was partially funded by IED (EPA).

One feature is a web site (www.ihpcentral.org), that contains a searchable bibliography on this subject. Since there is so much interest, particularly on the cost and productivity side, this is an important resource. Most of the listed items come with an abstract. Please pass this information to others that may have an interest. IED expects to place a link on the IED website soon (www.epa.gov/iaq). Next year, participants in the IHP project hope to market this resource, improve the web graphics and update the bibliography periodically. For more information contact Dave Mudarri (202.564.9053, mudarri.david@epa.gov).

<u>3-Radon - ASTMI E2121</u>. IED posted its final policy on the American Society for Testing and Materials International (ASTMI) E2121 radon mitigation standard in early April (see www.epa.gov/iaq/radon/index.html). Elizabeth Cotsworth, Barbara Pabotoy, Office of General Counsel (OGC) and EPA's standards executive had concurred on the final policy in late March. EPA's radon stakeholders were notified via email and provided a PDF

copy of the policy. After carefully considering the comments received, IED decided to retain the Radon Mitigation Standards (RMS), and also incorporate E2121 by reference. This decision adds a positive dimension to our collective efforts to reduce the risks posed by radon in homes. The policy will sunset EPA's Radon Mitigation Standards (RMS) in January 2006 when the E2121 authorization period ends. The policy provides sufficient time for: (a) industry, states and others to participate in the ASTMI process to amend E2121; (b) trainers to upgrade their curricula; and, (c) states to make administrative and regulatory changes that might be needed. Contact either Phil Jalbert (564.9431) or Gene Fisher (564.9418) for details.

<u>4-Radon - 2nd EPA National Radon Action Month A Success</u> The results from EPA's second annual National Radon Action Month (NRAM) events and activities included:

- 1-A Proclamation for National Radon Action Month was signed by Jeff Holmstead, AA for OAR.
- 2-Over 3,000 hotline calls (1-800-SOS-RADON), triple those of NRAM 2002.
- 3-EPA in cooperation with USDA, CRCPD, and National Safety Council conducted a national radon poster contest; the winner's award was presented by EPA Administrator Whitman.
- 4-The National Safety Council contributed \$25,000+ of "collateral" materials.
- 5-Distributed 300+ CDs containing radon documents, presentations and information.
- 6-Published 126 newspaper clips on radon and NRAM that reached 2,250,000 potential readers.
- 7-Several State governors signed state-wide proclamations.
- 8-Hundreds of state and local activities took place promoting awareness and encouraging testing and mitigation.
- 9-EPA web-page and many Cooperative Partners' web-pages featured radon and NRAM.
- 5-Asthma World Asthma Day 2003 May is Asthma Awareness Month and May 6 is World Asthma Day. To generate and support asthma education and intervention programs across the country, EPA has developed a World Asthma Day Event Planning Kit, particularly for state and local programs working on asthma and children's health issues. You may download the Kit from the EPA Web site at www.epa.gov/asthma or call 1-800-438-4318 to order a copy.
- 6-Asthma In-Home Asthma Environmental Education and Management Grants EPA has awarded grants to the Health Choice Network in Miami, FL and Erie County Department of Health in NY to assess the effectiveness of in-home asthma education and management approaches to educating children with asthma and their parents on how to identify and mitigate indoor environmental asthma triggers. Two additional FY03 grants are in the award phase.
- 7-Asthma Research Strategy (www.epa.gov/ORD/WebPubs/final/) The strategy is intended to guide the planning of EPA research efforts to address the significant issues of exposures, effects, risk assessment, and risk management of environmental pollutants relevant to asthma. Contact: James Raub, Office of Research and Development, National Center for Environmental Assessment, 919-541-4157; email: raub.james@epa.gov
- <u>8-Asthma Helping States Reduce Environmental Triggers of Asthma</u> The Environmental Council of the States and the Association of State and Territorial Health Officials, with EPA and CDC support, have developed a draft action agenda to reduce environmental triggers of childhood asthma. An RFP will be released in the near future.
- 9-TfS 4th Annual Indoor Air Quality Tools for Schools (TfS) National Symposium EPA will host the TfS National Symposium on October 26 28, 2003, in Washington, D.C. Registration information is at www.epa.gov/schools. School districts or individual schools can submit applications for National Excellence awards for their IAQ Tools for Schools programs. Applications and further information can be obtained at www.epa.gov/schools.

10-Schools - Healthy School Environments Web Portal (www.epa.gov/schools) EPA has launched a 1-stop

shopping web site to provide the public with access to on-line resources from EPA, other Federal Agencies, states, local governments and non-governmental organizations, to address environmental issues in schools.

11-Schools - Promoting Design Tools for Schools at a Council for Educational Facility Planners Meeting Michele Guarneiri of IED's Tools for Schools Team attended the Council for Educational Facility Planners International Southeast Regional Meeting, which was held in Nashville, TN from 4/12-15. She made presentations at two separate sessions introducing potential users to the IAQ Design Tools for Schools website, a comprehensive web-based resource tool for creating healthier, high performing new schools and healthier school reconstructions.

12-Schools - 7th Annual School Building Day Celebration Jeff Holmstead provided the Keynote address at the 7th Annual School Building Day event, sponsored by the Council of Educational Facility Planners International at The National Building Museum on 4/11. The celebration of our nation's schools as learning environments provided a public forum to educate all on the link between safe, healthy, and high performing schools with good indoor air quality and student health and achievement. The event this year spotlighted District of Columbia Middle School children who participated in a student design competition in which they designed their "Dream Learning Space."

13-Schools - Presentation at Council for Great City Schools' Meeting Jennifer Keller, Schools Team Leader, was invited to attend a meeting of the top 160 school districts (by population) in the U.S. to present Indoor Air Quality Tools for Schools information. The Council for Great City Schools' gathering of Chief Operating Officers was held in Austin, TX from 4/09-11 and featured discussions on healthy and safety issues and benchmarking energy and financial indicators. This was the first time we had the opportunity to address this influential group of decision makers about EPA's indoor air quality program for schools.

14-Schools - The School Health Initiative Environment, Learning, and Disease (SHIELD) study examined children's exposure to complex mixtures of environmental agents (i.e., volatile organic chemicals, environmental tobacco smoke, allergens, bio-aerosols, metals, pesticides). Details of this 550 student probability study, including design and monitoring methods, have been published previously (JEAEE, Sexton et al. 2000). Results of cotinine measurements (Hecht et al. 2001, Sexton et al. 2003a) and a summary of recruitment, retention, and compliance outcomes (Sexton et al. 2003b) have also been published. A manuscript that compares indoor air quality between the older Lyndale school and the newer Whittier school has been submitted for publication.

Analysis of other exposure results (metals, volatile organic compounds, pesticides) is underway, and only preliminary data are presented here. An EPA-funded companion project incorporated a pilot epidemiological study to examine links between measured exposures and effects on both respiratory health (e.g., spirometry and peak flow data) and learning outcomes (e.g., standardized test scores, measures of academic performance, attendance). These results will be the subject of a separate final report. For more information contact Ken Sexton (612.626.4244, ksexton@umn.edu).

15-Cleveland Smoke-free Homes Event The Administrator, Regional Administrator Tom Skinner, and several other enthusiastic speakers gave EPA's Smoke-free Homes Initiative a big national boost on Friday, April 11, in Cleveland, Ohio. They urged parents, especially "moms", to protect their children from second-hand smoke, launched a new media campaign by the Consumer Federation of America Foundation's "My Mom's My Hero", and gave awards to two "hero moms" who had already taken the important and often difficult step to make their home and car smoke-free. The event received very good media coverage and was featured on EPA's homepage for several days. While IED's ETS Team had spearheaded the event, it could not have happened without the excellent contributions made by national and local organizations, Tremont Elementary School, Metro Health Center hospital, and HQs and Region 5 staff.

16-ETS – Second-hand Smoke Public Service Announcement On April 11, under a cooperative agreement with EPA the Consumer Federation of America Foundation, and the American Medical Association launched a new public service announcement (PSA) for TV and radio called "My Mom's My Hero". This attention-getting PSA is designed to motivate mothers who smoke to make their homes smoke-free to protect their children's health. The PSA urges parents to call EPA's smoke-free homes pledge hotline at 1-866-SMOKEFREE. You can visit www.epapsa.com to view or order the PSA.

<u>17-Mold - IED & OPP Cooperating on Agency Mold Policies</u> Elissa Feldman, John Girman, and Laura Kolb met with Frank Sanders, Director of the Anti-microbial Division, Office of Pesticide Programs (OPP), and members of his staff on 4/11 to discuss mold issues and future directions for collaboration and coordination on mold-related work. OPP is developing an approach to products used to eradicate mold, including potentially changing the labelling requirements to explain the need for a more comprehensive approach.

{Visit the CIAQ Website at www.epa.gov/iaq/ciaq/index.html}

NEXT CIAQ MEETING: Wednesday, 23rd July 2003 from 1:00 to 3:30 pm at Judiciary Square.

CIAQ Attendees: Wednesday, 23April 2003

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